

Total length, 18 inches; bill,  $4\frac{1}{4}$ ; wing,  $5\frac{3}{8}$ ; tail, 7; tarsi,  $1\frac{1}{2}$ .

*Hab.* The Cordillerian Andes.

Nearly allied to *Pteroglossus* (*Aulacorhynchus*) *hæmatopygus*, from which and from all other members of this section of its family it differs in its much larger size.

### XXX.—*Information respecting Scientific Travellers.*

MR. E. FORBES.

WE have letters from our friend E. Forbes, Esq., dated from the coast of Lycia in February last. In consequence of the Beacon having remained on that coast for the purpose of procuring the antiquities discovered by Mr. Fellows at Xanthus, Mr. Forbes had given up his intention of wintering on the Red Sea, and was thus enabled to pursue his researches in the Archipelago and Asia Minor in the fullest and most satisfactory manner. At the date of his letters he was about to make an excursion into the interior of Lycia and Pamphylia in company with Lieut. Spratt and the Rev. E. Daniell, whose united labours will doubtless throw much new light on the geography, antiquities and natural history of that little known region. After this tour they were to make a detailed survey of Rhodes, and then to join the Beacon on the coast of Crete, where she will spend the summer. Mr. Forbes's observations on the winter vegetation of Lycia are given below at page 251.

In a letter to us, dated Xanthus, Asia Minor, February 28, 1842, he thus writes:—

“My work has been entirely among the Cyclades and on the south-west coast of Asia Minor. During the summer I made the circuit of the islands, a tour of very great interest, which enabled me to use the dredge with much effect, dredging in a very great number of localities and on as many sorts of sea-bottom as possible. I have since conducted a line of dredgings across the Archipelago and down the coast of Lycia, and have succeeded in obtaining the inhabitants of depths hitherto unexplored, even from 100 to 220 fathoms. The ground at those depths is very uniform, and there is a deposit of white sediment, probably of great thickness, extending throughout the eastern Mediterranean, the animals living on which do not vary in localities 300 miles apart. At a depth of 200 fathoms I have found mollusca of the genera *Tellina*, *Corbula* and *Arca alive*, Annelides allied to *Serpula*, several Crustacea and Starfishes of the genus *Ophiocoma*. Zoophytes are found in nearly as great a depth. The mud from above 200 fathoms is full of the shells of *Pteropoda* and other floaters. Of fishes I have taken a little Goby frequently in depths between 60 and 100 fathoms. The distribution of fishes here is as uniform as that of the lower animals, the same species turning up on the south coast of the Morea as in that of Rhodes. I have made drawings of about a hundred species with a view to exhibit their colouring when alive or fresh taken; of the greater number of these I have either skins or specimens in spirits. My inquiries for fresh-

water fishes have hitherto been unsuccessful. The river Xanthus is said to contain them, but though I have offered to reward anybody who would bring me some, I have not been able to procure any.

“As however I mean to remain in this country while the ship is at Malta refitting, I hope during my excursions into the interior to succeed better. Among the other Vertebrata I have done but little, saving the collecting of reptiles. Marine operations have so taken up my time, that the preservation of birds and mammalia has been out of the question.

“Among the former, however, I have just procured a beautiful Kingfisher, probably the *Alcedo Smyrnensis*; among the latter, I am now busy collecting information regarding those inhabiting the mountains of Cragus and Taurus. Geology and botany have not been neglected, but for my chief botanical harvest I look forward to this season. Cerigo, Santorini, Rhodes and Lycia have yielded me a rich harvest of fossils. Among the results of my dredging are the recent analogues of several tertiary species of shells supposed extinct.”

Extracts from another letter of Mr. Forbes, dated Macri, Asia Minor, February 1842:—

“I am now in a new continent, one I had not rambled in before, and one, the scenes and wonders of which, I assure you, surpass most of those I had before admired in Europe. In the month of October I first set foot in Asia, a day or two after having been at Patmos, where, of course, I visited the traditional scene of St. John’s exile and meditations. The supposed cave where the great poet of Christianity wrote his grand work is almost hidden under the mass of gewgaws heaped upon it by the Greek monks who live in the monastery built over it. The monastery is not, however, an unworthy one, since for many ages it has been the chief school of the Archipelago. When I visited it, a large deal table with wooden forms ranged round it, under a shed open to the air and facing a delicious view of the sea and the distant islands, was the only furniture of this primitive university.

“Cnidus was the first footing afforded me in Asia, and the first of the many ruined and once famous cities which I have been destined to visit. Telmessus, where I now am, was the next, a site, every stone of which is familiar to me, in consequence of its having unexpectedly become the Beacon’s head-quarters. When I arrived here I had no expectation of remaining, and was glad to make the best of my time, starting off with one of our officers on an exploring tour into the interior. Our route was one never before travelled by tourist, and as our objects were antiquarian as well as scientific, the interest was doubled; not to mention the great pleasure of seeing the present inhabitants of the country in an unsophisticated state—a people possessed of more good qualities than any I had previously met, yet sadly labelled by geographers and travellers, who frighten all visitors from these shores by their bugbear tales of the ferocity of the natives. During our inland excursion we discovered several of the lost cities of Lycia, among others Choma and Balbura. I never thought city-hunting could have given me so much pleasure as it has done,

but it really is quite as exciting as the hunting of new plants and animals. If I lived in this neighbourhood I should turn antiquary before three months had rolled away. The ruined cities of Lycia are wonderfully beautiful; situated in the midst of the grandest alpine scenery, amid mountains rising almost from the sea-level to the great elevation of 10,000 feet, with stupendous precipices towering on all sides, and great forests and extended plains of infinite variety; every cliff carved into temple-tombs, such as you read of in accounts of Petra, and every hill-side covered with ruins of great theatres and temples. You may easily picture to yourself the interest and delight of travelling in such a country—one, too, almost unexplored, having been only made known to us within the last four years by Fellows.\*

“I mean to complete the exploration of Lycia, and to add to it Pamphylia, Phrygia, and Caria. I hope to discover Derbe, Lystra, and some other missing cities.”

Extracts from a letter dated Xanthus, Asia Minor, February 28, 1842:—

“I am now *en route* into the interior, with a view to the exploration of the antiquities, geography, and natural history of the unexplored parts of Asia Minor. I shall return to meet the Beacon in May, and I hope then to proceed to Candia. In autumn I shall probably go to Egypt before returning to Edinburgh.

“I shall not trouble you with an itinerary of my travels; suffice to say, that I have rambled, or rather cruised, in the Beacon’s Tenders through the Archipelago, and last autumn I accompanied one of our surveyors on his cruise to complete the survey of the Lycian coast. In January the Beacon found us here, having been sent down by Government to remove the marbles discovered here by Fellows. For the last three months we have been excavating marbles; some splendid things have turned up, which will greatly delight you when you see them. One set, representing the wars of the Amazons, is especially beautiful, and, to my mind, equal to the Elgin marbles both in the design and execution. Another frieze, of many pieces, is also of great interest and beauty; it represents the siege of a city, and, independent of the beauty and spirit of the combatants (in very high relief), includes representations of the most curious kind, of the fortifications and buildings of an ancient Lycian city. Some statues of great merit (but headless) have also been dug up. The crowning sculptures, however, are a set of bas-relief of exquisite beauty, in which the peculiar art of the Persians, as seen in Persepolitan sculptures, is combined with the freedom and execution of the Greeks. In all there is a ship-load, and the only difficulty to be overcome now is the shipping of them.

“This country is delightful, and is covered with ruins of the grandest kind. Every little excursion any of us have made into the interior has ended in the discovery of some lost ancient city. The

\* We are happy to state that Mr. Fellows has just returned, enriched with new stores of information upon the antiquities of the interesting country which he has visited for the third time.

present inhabitants are a fine, frank, hospitable race of Turks—as good a people as ever I came across.”

Another letter, dated Macri, February 28, 1842:—

“ I have now dredged right across the Archipelago, from Cerigo to Lycia. For two months I accompanied our little schooner on these coasts when she was deep-sounding, and dredged every day that a dredge could go down, keeping a register of the produce. The water is very deep, and the results were highly interesting, since nobody, I believe, has dredged so deep before, viz. from 100 to 220 fathoms. This I was enabled to do successfully by means of Ball’s little dredge; and, that the results might be strictly accurate, the depth was in each case ascertained, not only by the length of the rope, which is very fallacious, since currents affect it, but also by the patent sounding machine, which gives the depth to a foot. Of course, if all the results had been negative, such a series as I have collected, so strictly tested, would be invaluable; but they have not been negative, and if I am not mistaken, will throw great light on geology. Strange to say, the most characteristic species of shells in those depths are species known only in a fossil state hitherto.

“ You will be surprised when I tell you, that, generally speaking, the Mediterranean is not nearly so prolific in marine animals as our coasts, and that they are mostly smaller than those of our seas. Large species of the *Articulata* and *Radiata* are extremely scarce, and, the large shell-fish are very few in number. The results indeed, taken all in all, of my marine geological work have greatly surprised me, and turned out quite contrary to my expectations. As to floating animals, they are very scarce; and medusas are, literally, few and far between.

“ As to land animals, I find it difficult to give time to them, except the lower classes; but now I think I have succeeded in making one of our sailors a skinner of beasts. I am always on the look-out, especially here (Macri), which is much better than in the islands. Reptiles are always preserved, and I catch all I can. The larger ones, such as the land and river tortoises, I defer taking till near my return, as I shall then endeavour to bring a live supply for your anatomical researches. Of fishes I have now above 100 drawings, to show their colouring when fresh, and a good many specimens. I draw everything, and have a great stock of pictures on hand. As Malta is an excellent place for fish, I hope, before returning, to get a number there for dissection. In fossil geology I have made considerable collections, and lots of notes.

“ The manner in which, through unexpected circumstances, we have been, as it were, shut out of the world, has prevented me from writing the papers I intended for the Wernerian and Botanical Societies. Indeed I find it absolutely necessary to defer writing till my return, as I shall have to consult books and collections on many points.”

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MR. JERDON.

By letters from Mr. Jerdon, dated 16th February, 1842, we learn that that gentleman is still prosecuting his ornithological researches;

he has added several species to the Catalogue already published, and has corrected and verified many of his previous observations\*. He is now about to publish a series of *fifty* coloured lithographic drawings of the birds of the peninsula of India, to be entitled 'Illustrations of Indian Ornithology;' the drawings to be of the size of those accompanying the Catalogue, but the colouring to be more highly finished. They will be struck off both on royal 8vo and 4to sized paper, and the price will be respectively 20 and 25 rupees, or 2*l.* and 2*l.* 10*s.* We trust, as the work is limited, that it will meet with encouragement from the ornithologists of his own country.

## PROCEEDINGS OF LEARNED SOCIETIES.

### LINNÆAN SOCIETY.

December 21, 1841.—E. Forster, Esq., V.P., in the Chair.

Read an extract of a letter from William Griffith, Esq., F.L.S., to R. H. Solly, Esq., F.L.S., dated Serampore, the 11th of October 1841, containing the following observations:—

“ In *Santalum* the ovulum consists of a nucleus and an embryo-sac, prolonged both beyond the apex and base of the nucleus; the albumen and embryo are developed in the exerted part above the septum; the mass of the embryo is developed directly from the vesicle, which is the termination of a pollen tube; the seed (albumen) has no other proper covering than the incorporated upper separable part of the embryo-sac.

“ In *Osyris* the ovulum is reduced to a nucleus and an embryonary sac, prolonged exactly in the same directions as in *Santalum*, but not to such a degree anteriorly; this anterior portion resembling exactly the unchanged part of the sac of *Santalum* below the septum. The albumen and embryo are formed outside the sac, and are absolutely naked, or whatever covering they may have did not enter into the composition of the ovulum.”

Mr. Griffith adds, “ I have lately looked at *Isoetes capsularis*, Roxb.; it is an instructive plant, for it shows that botanists are mistaken in their supposition as to the male. In Roxburgh's plant the contents of the sporangium are sometimes of two sorts, but both have the same origin, both are precisely similarly constituted, except perhaps as to contents; and the largest of these, the males of authors, become afterwards like the others, but larger. There can be no doubt that in all these plants the true sporules or seeds are those produced by division of an original simple cell or its contents. *Isoetes* and *Azolla* prove too a thing of some importance, that the dissimilar organs which have so puzzled botanists may have a similar origin. The true male of *Isoetes* will probably turn out to be the oblong, cordate, fleshy laminæ above the female. On the male my observations were stopped by indisposition. As a male it is certainly anomalous; it is probably, I conjecture, developed originally within the

\* Catalogue of the Birds of the Peninsula of India, by T. C. Jerdon. Madras, 1839.